

\$50,000 per QALY. **CONCLUSION:** It cannot be confidently concluded that either *H. pylori* screening was a cost-effective strategy compared to no screening in all Chinese at age of 40 years. Nevertheless, serology screening has demonstrated much more potentiality to be a cost-effective strategy, especially in the population with higher gastric cancer prevalence.

WITHDRAWN**PGI8****PGI9****DEVELOPMENT OF A CLAIMS-BASED MARKOV MODEL FOR CROHN'S DISEASE**

Malone DC¹, Thompson HC², Van Den Bos J³, Popp J², Draaghtel K³, Rahman MI²

¹University of Arizona, Tucson, AZ, USA, ²Centocor, Inc, Horsham, PA, USA, ³Milliman, Inc, Denver, CO, USA

OBJECTIVE: To develop a claims-based Markov model for Crohn's disease (CD) based on the American College of Gastroenterology (ACG) criteria. **METHODS:** A Markov model was developed using disease states as defined by ACG CD practice guidelines. The study sample consisted of unique individuals ≥ 18 years old from the Medstat Marketscan databases (Medicare and Commercial) with ≥ 3 years of continuous enrollment from 2000–2005, and with an ICD-9 diagnosis code of 555.xx. Patients were classified as severe-fulminant, moderate-severe, mild-moderate, or remission based on the ACG criteria. Patient exposure was divided into six month intervals, starting on first day of exposure. For each interval, disease state was defined according to the most severe disease activity. Transition probabilities between disease states were calculated based on movement from one six month period to the next. Costs of disease states were calculated using mean per member per month (PMPM) medical claim costs, and the model was run separately for males and females due to differences in life expectancy, assuming 30 years old at start. Quality-adjusted life year (QALY) estimates were obtained from the literature. **RESULTS:** There were 23,419 unique individuals, with 198,497 eligible 6-month intervals. The distribution of disease states were: remission (99,584; 50.2%), mild-moderate (24,788; 12.5%), moderate-severe (56,686; 28.6%), severe-fulminant (17,439; 8.8%). Model results for both males and females showed that, as disease severity increased, cost per QALY also increased. Cost per QALY for mild-moderate disease in males was \$4,310 whereas for severe-fulminant disease, it was \$68,538. Results were similar for females (\$4,311 vs. \$68,643). **CONCLUSION:** Results of this model indicate that cost of CD increases as disease severity increases. In addition, although less time is spent in the severe disease state, the cost per QALY was high, suggesting that therapies that can keep patients in other disease states may prove to be beneficial.

PGI10**DOES THE DOSING FREQUENCY OF PROTON PUMP INHIBITORS (PPIs) AFFECT SUBSEQUENT RESOURCE UTILIZATION AND COSTS AMONG PATIENTS DIAGNOSED WITH GASTROESOPHAGEAL REFLUX DISEASE (GERD)?**

Boulanger L¹, Mody RR², Bao Y¹, Ancukiewicz V¹, Russell MW¹

¹Abt Associates Inc, Lexington, MA, USA, ²TAP Pharmaceutical Products Inc, Lake Forest, IL, USA

OBJECTIVE: To assess utilization and costs of health care services for patients diagnosed with gastroesophageal reflux disease (GERD) that were dispensed once (QD) vs. twice (BID) daily PPIs. **METHODS:** Employing Thomson's MarketScan Database, GERD patients 18+ years of age with 1+ PPI dispensed, but had no esophagitis or Barrett's esophagus diagnosed during 2003–

2004 were selected. The date of the first observed PPI was considered as the index date. Frequency of PPI dosing (QD vs. BID) was assessed from pharmacy claims. Differences in total and GERD-related costs by cohort for the 12-month period following the index date were assessed using multivariate regression, adjusting for demographic and clinical characteristics (age, gender, region, Charlson comorbidity score [CCS], pre-index diagnosis of esophageal stricture or hemorrhage [ESH], and pre-index use of PPIs). **RESULTS:** A total of 219,365 GERD patients on QD PPI therapy and 23,011 patients on BID PPI therapy were identified. The cohorts were similar in age, but the QD cohort had a larger proportion of males (41% vs. 37%, $p < 0.01$). Mean CCS was higher in the BID cohort (1.2 vs. 1.0, $p < 0.01$). A higher proportion of BID patients had pre-index ESH diagnosed (4% vs. 3%, $p < 0.01$) and PPI's dispensed (58% vs. 47%, $p < 0.01$). In the 12-month follow up period, the mean number of office visits was higher among BID patients (14.5 vs. 12.4, $p < 0.01$). Total health care payments were about \$2900 higher for BID patients (\$11,102 vs. \$8,169, $p < 0.01$), 55% of which were payments for services. GERD-related costs were about \$750 higher for BID patients (\$1941 vs. \$1187, $p < 0.01$). On an adjusted basis, total and GERD-related payments were approximately \$1500 and \$450 higher among the BID cohort. **CONCLUSION:** Findings indicate that patients diagnosed with GERD who receive BID PPI therapy incur more and GERD-related health care resource utilization and plan payments relative to those on QD therapy.

PGI11**DIRECT COST SIMILARITIES BY POINT OF SERVICE FOR PERSONS WITH CONSTIPATION OR IRRITABLE BOWEL SYNDROME PLUS CONSTIPATION IN THE SIX MONTHS BEFORE AND AFTER DIAGNOSIS: AN EMPLOYER PERSPECTIVE**

Kleinman NL¹, Brook RA², Melkonian AK³, Evans SD⁴, Talley NJ⁵, Baran RW⁶

¹HCMS Group, Paso Robles, CA, USA, ²The JeSTARx Group, Newfoundland, NJ, USA, ³The HCMS Group, Cheyenne, WY, USA, ⁴Sierra Health Services, Las Vegas, NV, USA, ⁵Mayo Clinic College of Medicine Jacksonville, FL, Rochester, MN, USA, ⁶Takeda Global Research and Development Center, Inc, Deerfield, IL, USA

OBJECTIVE: Both constipation (C) and irritable bowel syndrome plus C (IBS+C) are known to be very costly. However, it is unknown whether the costs of C are driven by the same factors that drive the costs of IBS+C. We aimed to assess the cost of illness (COI) for C without and with IBS (IBS+C) by point of service. **METHODS:** A retrospective analysis was conducted using multiple US-based employers' health claims data from 2001–2005. Data included medical, pharmacy, payroll, and demographics. ICD-9 Codes were used to include employees in the C cohort: 564.0 (Constipation), 564.00 (Unspecified), 564.01 (Slow Transit), and 564.09 (Other). Employees with C and an ICD-9 for IBS (564.1x) at any time were included in the IBS+C cohort. Propensity-scores based on demographics, job-related variables, region, existence of medical claims, and Charlson Comorbidity Index Score were used to match five C to each IBS+C cohort employee. For both cohorts, the index date was the date of the first claim for the condition. Per member per month (PMPM) costs (adjusted to 2006 US\$) were compared for each category based on claims from: doctor's office, inpatient hospital, outpatient hospital/clinic, emergency department (ED), laboratory, other locations, and pharmacy. Costs were compared between groups before diagnosis, after diagnosis, and change (before–after). **RESULTS:** Data were available for 203 persons with IBS+C and 1015 propensity-score-matched C subjects.